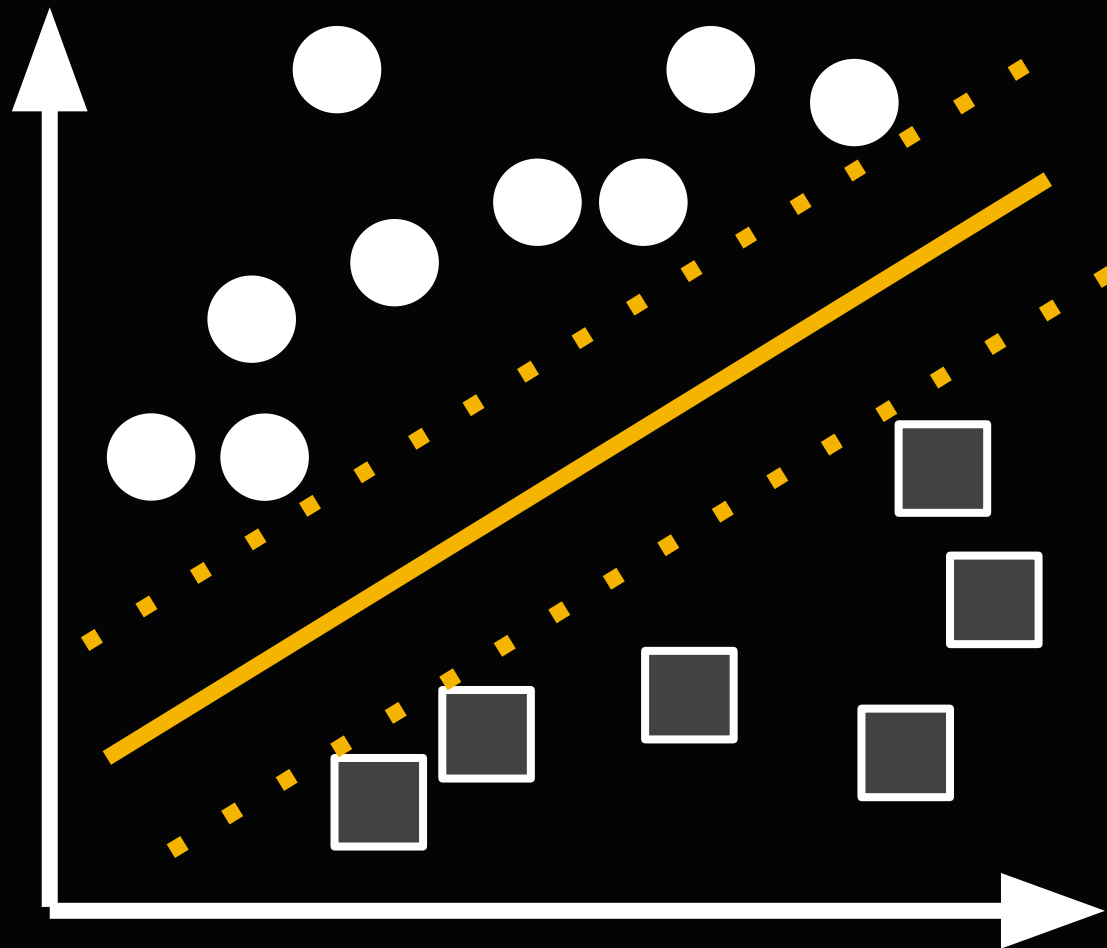


Precision & Recall

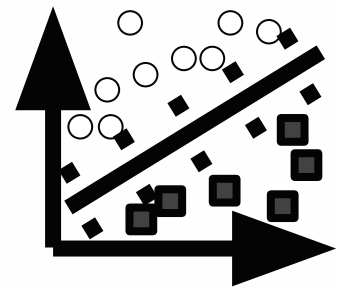


✓
0s [17] `metrics.precision_score(y_test, prediction)`

0.9883720930232558

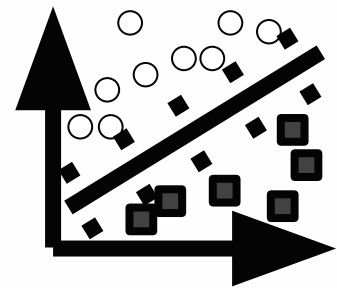
✓
0s [18] `metrics.recall_score(y_test, prediction)`

0.9444444444444444



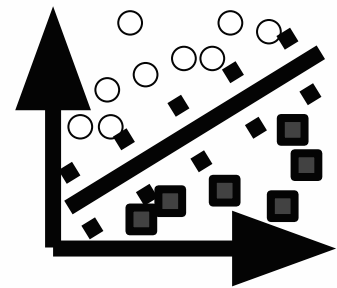
Precision-Recall

- a useful measure of **model accuracy**
when the classes are very **imbalanced**



- High precision means a **low false positive** rate
- High recall means a **low false negative** rate.

	Actually positive (1)	Actually negative (0)
Predicted positive (1)	True positives	False positives
Predicted negative (0)	False negatives	True negatives

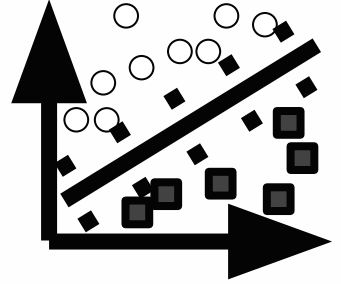


- **High precision** means the model is returning accurate results
- **High recall** means the model is returning a majority of all positive results

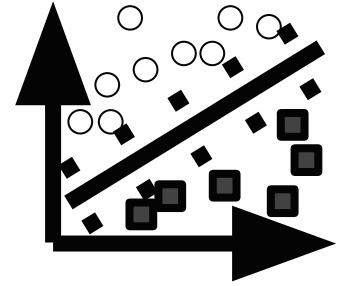
	Actually positive (1)	Actually negative (0)
Predicted positive (1)	True positives	False positives
Predicted negative (0)	False negatives	True negatives

High recall and low precision

- returns many results
- most **predicted labels are incorrect**

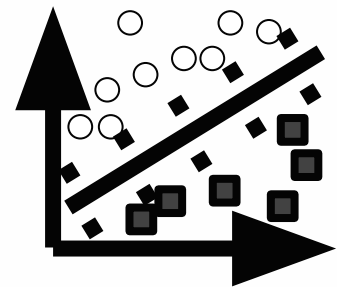


High precision and low recall



- Returns **few results**
- Most predicted labels are **correct**

Ideal



- high precision and high recall
 - returns **many results**
 - **all results labeled correctly**

Precision & Recall ✓

